Reference Guide: Identifying Phishing Emails and Email-Based Malware

Audience: Cybersecurity professionals and company email users

Purpose: Help identify suspicious emails and prevent security breaches

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SECTION 1: For General Email Users (Non-Technical Staff)

Common Signs of Phishing Emails:

1. Urgent or Threatening Language

Example: "Your account will be deactivated in 24 hours!"

➤ Don't panic. Real companies don't use threats.

2. Unknown or Fake Sender

Example: security@gmaill.com instead of security@gmail.com

➤ Check the sender's email carefully.

3. Suspicious Links

Tip: Hover over a link before clicking.

➤ If the link looks unfamiliar or mismatched, don't click.

4. Unexpected Attachments

Warning: Attachments with .exe, .zip, or .docm (macros) may be malware.

➤ Only open attachments from trusted sources.

5. Requests for Private Info

Example: Asking for your password or bank info.

➤ Never share personal or company info via email.

SECTION 2: For Cybersecurity Professionals

Technical Indicators of Phishing or Malware:

Mismatch in Header Fields

➤ If "Reply-to" differs from the "From" address, it could be spoofed.

• Embedded Scripts

➤ Look for hidden JavaScript in HTML emails.

User Pattern Alerts

➤ Multiple reports of the same email can signal a phishing campaign.

• Malicious Hashes or IPs

➤ Scan suspicious attachments with VirusTotal or hybrid-analysis.

Macro Payloads

➤ Flag .doc or .xls files that request macro access.

Quick Response Guide

Situation	What to Do
Suspicious email received	Don't click or reply. Report to IT/Security.
Opened malicious attachment	Disconnect from Wi-Fi. Contact Security Ops.
Unsure if email is legitimate	Ask your IT team before interacting.

Tips for Both Staff & Security Teams

- Use email filters and spam protection.
- Provide regular cybersecurity training.
- Encourage a "pause and check" culture before clicking.

This guide was created as part of the Google Cybersecurity Certificate assignment using the TCREI prompting framework and generative AI assistance.